ABSTRACT

AIM: To evaluate the efficacy of preoperative topical antibiotics before cataract surgery. To identify the conjunctival bacterial flora before and after the instillation of Moxifloxacin. To establish the group of people showing more cultural positivity.

MATERIALS AND METHODS: This is a prospective study wherein 100 patients admitted for cataract surgery were recruited for this study. After getting ethical committee approval and consent from the patients, a conjunctival swab was obtained from the eye that was going to be operated before instillation of Moxifloxacin eye drops. Then moxifloxacin eye drops was instilled four times at fifteen minutres interval one hour before surgery after which the second conjunctival swab was obtained from the same eye. Both the cultures were sent to the microbiological lab for further processing.

RESULTS: Coagulase negative Staphylococcus aureus and Corynebacterium diphtheria were isolated from 54% of the patients before the instillation of moxifloxacin. Among them, 40 % of patients showed staphylococcus aureus positivity and corynebacterium diphtheria to about 14 % positivity. This was effectively reduced to 24% after the instillation of moxifloxacin . also, the camp patients showed more conjunctival bacterial culture positivity which ws also found to be statistically significant.

CONCLUSIONS: All patients harbour saprophytic bacterial flora in their conjunctiva. These organisms tend to become pathogenic and cause eye disease if the defense mechabnisms faulter. Cataract surgery is one important cause for the defense mechanism in the eye to be compromised. Therefore,the prophylactic method of instillation of preoperative topical moxifloxacin is necessary to optimize bacteria control in all patients undergoing catataract surgery.